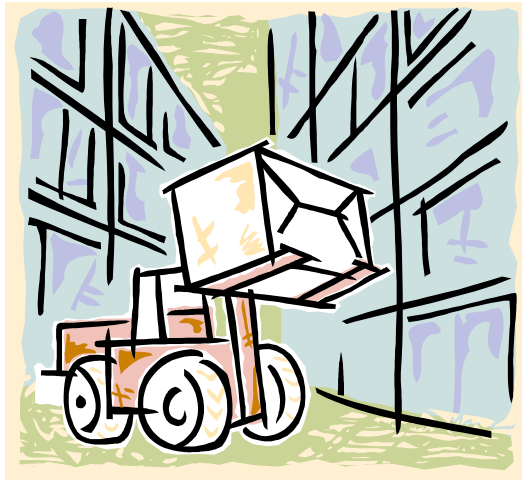


Data Warehousing



HCAT Program Review
Park City, UT
July 2004

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE JUL 2004		2. REPORT TYPE		3. DATES COVERED 00-00-2004 to 00-00-2004	
4. TITLE AND SUBTITLE Data Warehousing				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Rowan Technology Group,1590 S. Milwaukee Ave., Suite 205,Libertyville,IL,60048				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES 24th Replacement of Hard Chrome Plating Program Review Meeting, July 20-21, 2004, Park City, UT. Sponsored by SERDP/ESTCP.					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 18	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

The Web Site



The screenshot shows the HCAT Home Page in a Microsoft Internet Explorer browser window. The address bar displays <http://www.hcat.org/>. The page features the HCAT logo and a list of links. Annotations include a yellow box with the URL www.hcat.org and a yellow arrow pointing to the address bar. A red starburst graphic says "Click here to check out our new collaboration website" with an arrow pointing to a yellow box containing the text "Click here for information on July 2004 HCAT meeting including agenda and registration". A large yellow box on the right contains the text "To reach the data warehouse you click HERE or HERE Goes to www.materialoptions.com".

HCAT
SPONSORED BY ESTCP ★ JG-PP ★ PEWG
HARD CHROME ALTERNATIVES TEAM

- **HCAT Member Workspace** - This site contains detailed information on all HCAT projects, data, reports and meetings
- **About HCAT** - Team objectives, members, background
- **Reports, Publications & Presentations, Joint Test Protocols**
- **Aircraft Systems Being Validated** - Landing gear, gas turbine engines, propeller hubs, hydraulics, helicopter rotor heads
- **Related Web Sites** - Other sources of Hard Chrome information
- **Contact HCAT**
- **HCAT Team Members** - Names and contact information of HCAT team members

Updated June 30, 2004

www.hcat.org

Click here to check out our new collaboration website

Click here for information on July 2004 HCAT meeting including agenda and registration

To reach the data warehouse you click **HERE** or **HERE** Goes to www.materialoptions.com

HCAAT data site – www.materialontology.com

Username
hcat@hcat.org
Password:
hello.hcat

Some people have their own usernames with more extensive rights



Type	Name	Size	Modified	Version
Folder	HCAT Papers, Presentations, Publications	10 Ob.	2004/01/30 17:39	
Folder	HCAT Reports and Test Protocols	11 Ob.	2004/06/30 15:49	
Folder	News and Next HCAT Meeting	2 Ob.	2004/06/08 13:57	
Folder	Temporary Data Sharing - anonymous users			
File	Canada Meeting Aug 12 2003	6 Ob.	2003/09/15 14:46	
File	Accessing the HCAT web site.doc	28.5 Kb	2003/08/14 18:50	1
File	Problems and error messages	6.93 Kb	2003/07/08 17:50	
File	Projects and Partners	301 Bytes	2004/01/21 15:24	

Si vous etes Francais et vous voulez changer la langue, cliquez ici!!

HELP!!
Instructions on doing the most common tasks

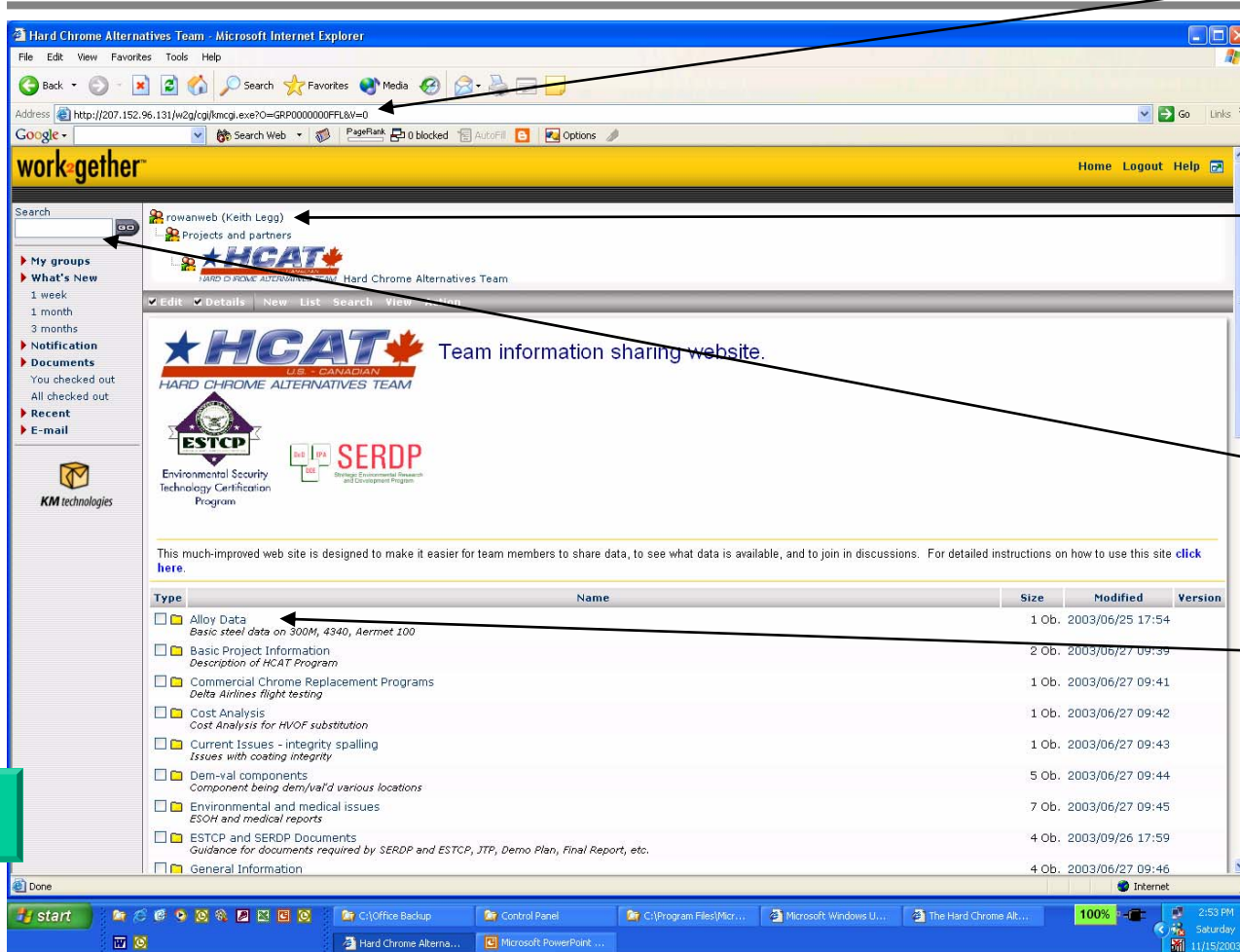
HCAT main page

Words are links to the most-used areas

New: Reports and JTPs Open to public

Place to share Info if having Password problems

What You See Is Sometimes What You Get



work-gether Home Logout Help

Search

rowanweb (Keith Legg)

Projects and partners

HCAT

Hard Chrome Alternatives Team

Team information sharing website.

ESTCP Environmental Security Technology Certification Program

SERDP Strong Economic Research and Development Program

This much-improved web site is designed to make it easier for team members to share data, to see what data is available, and to join in discussions. For detailed instructions on how to use this site [click here](#).

Type	Name	Size	Modified	Version
Folder	Alloy Data <i>Basic steel data on 300M, 4340, Aermet 100</i>	1 Ob.	2003/06/25 17:54	
Folder	Basic Project Information <i>Description of HCAT Program</i>	2 Ob.	2003/06/27 09:39	
Folder	Commercial Chrome Replacement Programs <i>Delta Airlines flight testing</i>	1 Ob.	2003/06/27 09:41	
Folder	Cost Analysis <i>Cost Analysis for HVOF substitution</i>	1 Ob.	2003/06/27 09:42	
Folder	Current Issues - integrity spalling <i>Issues with coating integrity</i>	1 Ob.	2003/06/27 09:43	
Folder	Dem-val components <i>Component being dem/val'd various locations</i>	5 Ob.	2003/06/27 09:44	
Folder	Environmental and medical issues <i>ESOH and medical reports</i>	7 Ob.	2003/06/27 09:45	
Folder	ESTCP and SERDP Documents <i>Guidance for documents required by SERDP and ESTCP, JTP, Demo Plan, Final Report, etc.</i>	4 Ob.	2003/09/26 17:59	
Folder	General Information	4 Ob.	2003/06/27 09:46	

URL you can copy and send in e-mail

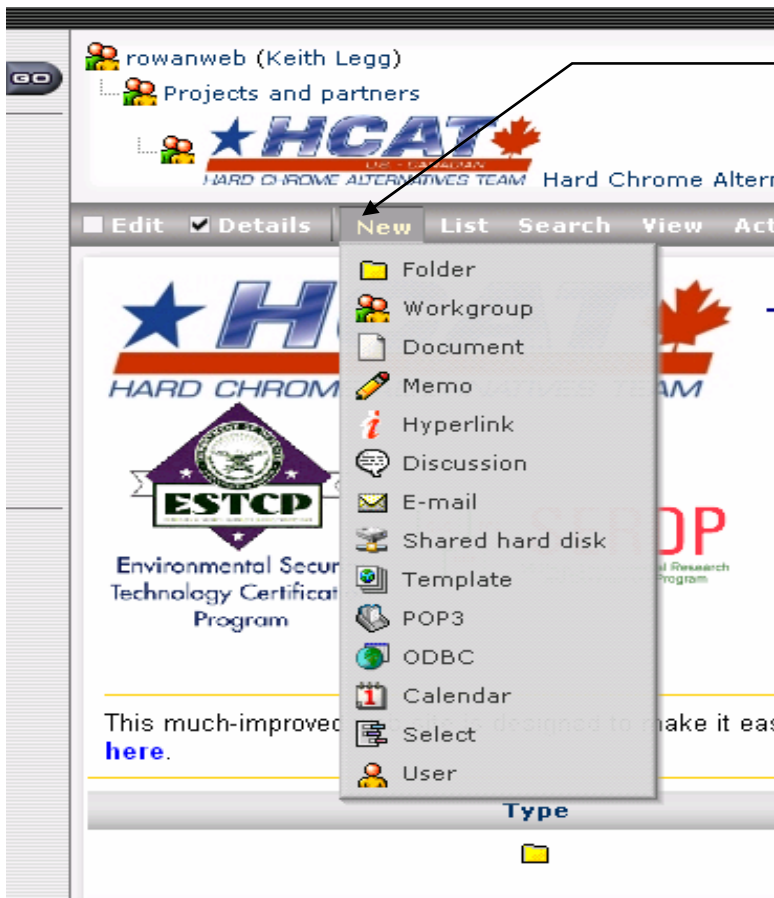
Username – if “anonymous” log in again

Seek and ye shall find

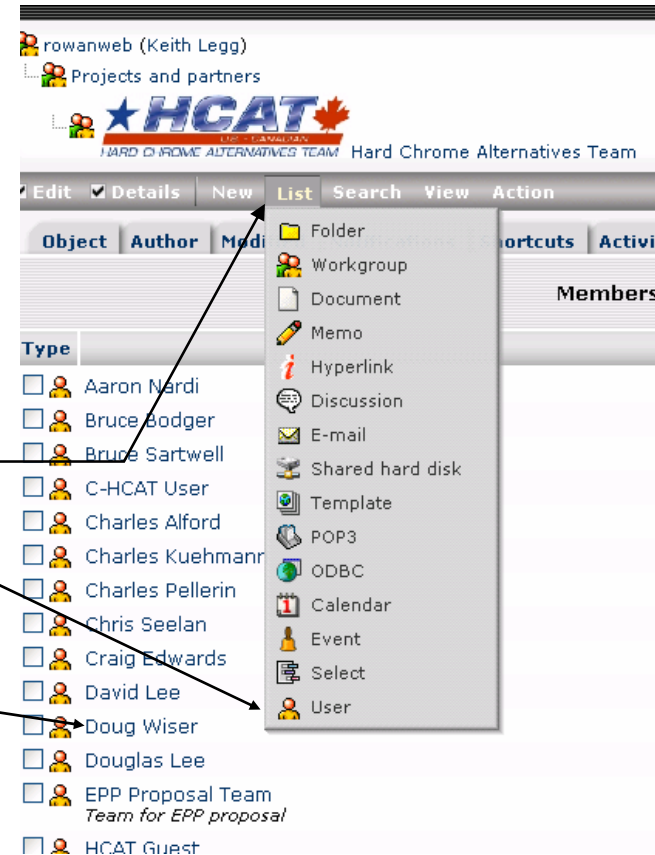
Folders filled with good stuff! Note descriptions



What's on the menu?



**New
 folders,
 files,
 links,
 etc.**



**List
 users
 and
 click
 name
 to e-
 mail**

Downloading files

1. Move cursor up and down
2. Each file area turns yellow as you cross it
3. Right-click yellow area rather than filename
 - For most files right-clicking filename works, but not all
4. Click Save
5. Follow the instructions

Left-click filename if you want to view on-line rather than download

The screenshot shows a web browser window with the following details:

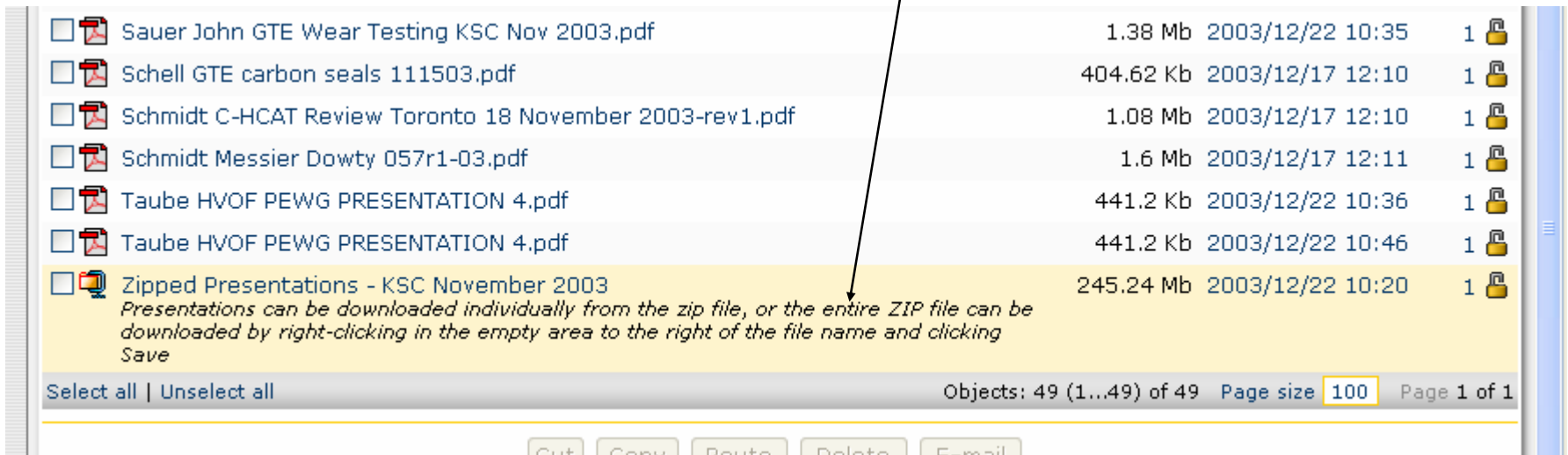
- Browser:** Microsoft Internet Explorer
- Address Bar:** <http://www.materialoptions.com/w2g/cg/!mcgi.exe?O=DJR0000000IM2&W=0>
- Page Title:** work:gether
- Navigation:** Home, Logout, Help
- Search:** Search bar with 'GO' button
- Left Sidebar:**
 - My groups
 - What's New (1 week, 1 month, 3 months)
 - Notification
 - Documents (You checked out, All checked out)
 - Recent
 - E-mail
 - KM technologies logo
- Main Content:**
 - rowanweb (Keith Legg)
 - Projects and partners
 - HCAT logo
 - Hard Chrome Alternatives Team
 - Meetings - HCAT program review
 - 23rd Program Review, KSC, Florida, Nov 2003
 - Presentations
- File List Table:**















Type	Name	Size	Modified	Version
[icon]	Alford HVOF PEWG PRESENTATION 4.pdf	441.2 Kb	2003/12/22 10:26	1
[icon]	Aylor ESD Meeting Nov 2003.pdf	3.23 Mb	2003/12/17 11:53	1
[icon]	Beardsley Caterpillar hydraulic coatings.pdf	1.5 Mb	2004/03/24 09:12	1
[icon]	Benaben HCAT Tech2.pdf	641.75 Kb	2003/12/22 10:26	1
[icon]	bretzFATIGUEscape.pdf	1.58 Mb	2004/03/24 09:13	1
[icon]	Deveraux - 1. HCAT Nov 2003 KSC.pdf	3.63 Mb	2003/12/22 10:46	1
[icon]	Deveraux - 2. HCAT Nov 2003 KSC Grinding Spec.pdf	265.88 Kb	2003/12/22 10:46	1
[icon]	Deveraux - 3. P-3 SLAP HVOF MLG Piston Final Report	13.56 Kb	2004/03/24 09:13	1
[icon]	Deveraux - 4. P-3 NAVAIR HVOF APPROVAL LETTER.pdf	80.97 Kb	2003/12/22 10:50	1
[icon]	Edwards Hill bend testing.pdf	1.81 Mb	2003/12/17 09:08	1
[icon]	Garcia HCAT HVOF - November 2003.pdf	882.44 Kb	2003/12/17 11:54	1
[icon]	Gebel Inovati-KM_V1.pdf	9.4 Mb	2004/03/24 09:13	1
[icon]	Gonzalez Hcat15 CapeCanaveral Nov03.pdf	2.43 Mb	2004/03/24 09:14	1
[icon]	Grendahl AFOSR HCAT 18 Nov 03.pdf	3.77 Mb	2003/12/17 11:57	1
[icon]	Grendahl AFRL HCAT 18 Nov 03.pdf	2.79 Mb	2003/12/17 11:58	1
[icon]	Ham-Sund-Prop-Update_Nardi	1.65 Mb	2003/12/01 07:55	1
[icon]	Update of testing performed for the Propeller Hub Chrome Plate Replacement Testing			
[icon]	HCAT carbon seals 111503 - Schell.pdf	404.62 Kb	2003/12/01 16:36	1
[icon]	JACOBS - HCAT 11-03 FL FINAL REVISION.pdf	1.54 Mb	2003/12/02 10:50	1
[icon]	Legg Cr and Cd replacement options.pdf	2.2 Mb	2003/12/17 12:00	1
[icon]	Legg - Heroux Producibility Studies.pdf	178.26 Kb	2003/12/22 10:29	1
[icon]	Legg ID Plasma Spray coatings.pdf	882.1 Kb	2003/12/22 10:30	1
[icon]	Legg - Web site update.pdf	1.08 Mb	2003/12/22 10:30	1
[icon]	Legoux, Legg ID Orlando Nov 03.pdf	1.62 Mb	2003/12/22 10:31	1
[icon]	Legoux Process Mapping Studies final.pdf	621.41 Kb	2003/12/17 12:06	1
[icon]	Moorman HCAT NAVAIR Update Nov 2003.pdf	2.09 Mb	2003/12/22 10:32	1
[icon]	Moorman HCAT NAVAIR Update Nov 2003.ppt	1.25 Mb	2004/06/30 15:04	1
[icon]	Nardi Hamilton Sundstrand Prop Hub summary.pdf	1.65 Mb	2003/12/17 12:07	1
[icon]	Negre ECOCHROM HCAT MEETING presentation.pdf	1.82 Mb	2003/12/17 12:07	1
[icon]	Panza Giosa HCAT_03-11-17.pdf	2.07 Mb	2004/03/24 09:15	1
[icon]	Peterson 3M finishing.pdf	741.97 Kb	2003/12/17 12:08	1
[icon]	Pollard Army TWG Brief 11-17-03.pdf	213.28 Kb	2003/12/22 10:33	1
[icon]	Price HCAT Nov 19.pdf	3.81 Mb	2003/12/17 12:09	1



What about Zip files?

- Some files are zipped – e.g. all the briefings from the meeting
- Left-click to see the enclosed files and download them in usual way
- But you can't download a zip by right-clicking the filename, only by right-clicking in the yellow area

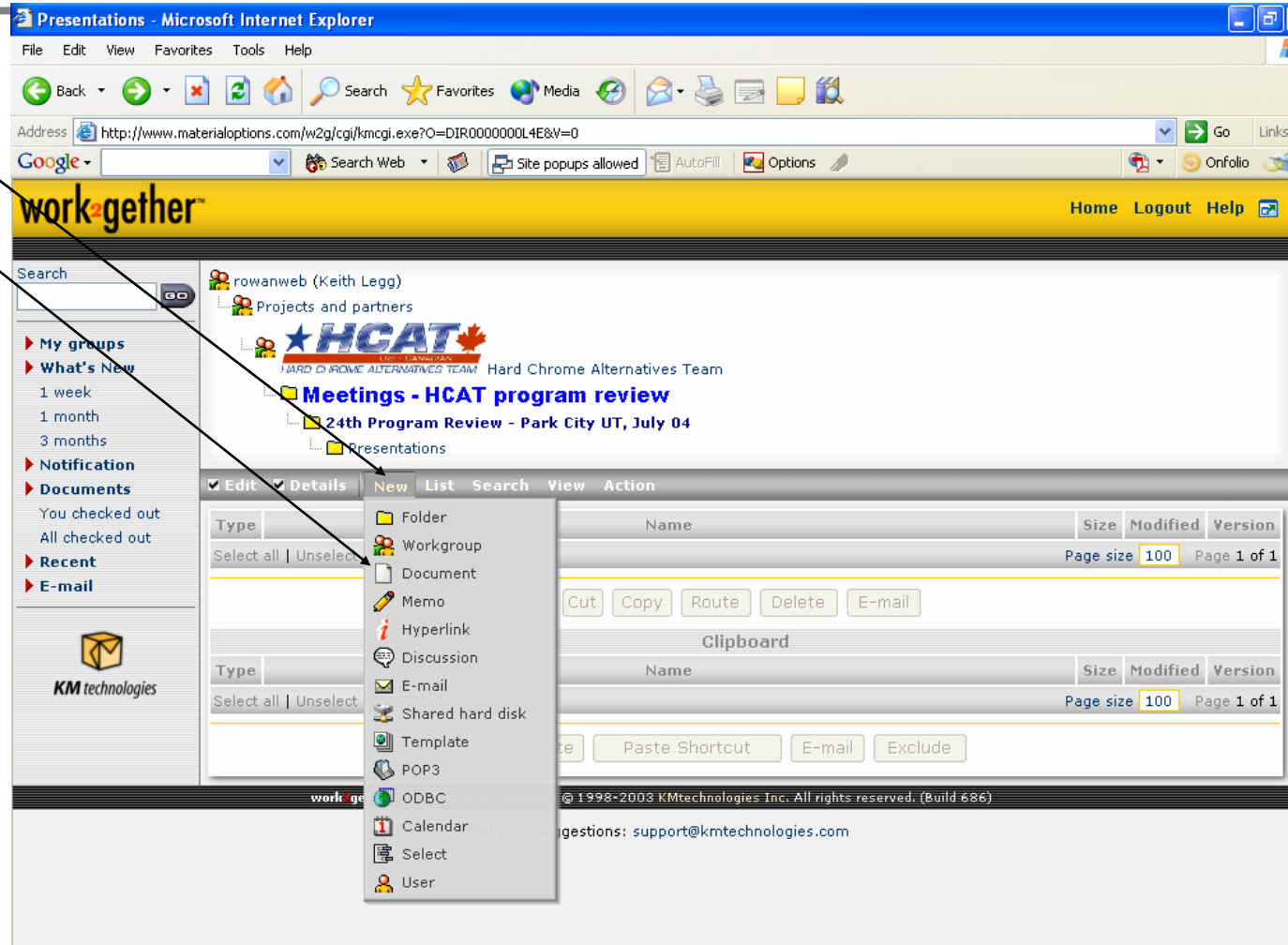


<input type="checkbox"/>	 Sauer John GTE Wear Testing KSC Nov 2003.pdf	1.38 Mb	2003/12/22 10:35	1	
<input type="checkbox"/>	 Schell GTE carbon seals 111503.pdf	404.62 Kb	2003/12/17 12:10	1	
<input type="checkbox"/>	 Schmidt C-HCAT Review Toronto 18 November 2003-rev1.pdf	1.08 Mb	2003/12/17 12:10	1	
<input type="checkbox"/>	 Schmidt Messier Dowty 057r1-03.pdf	1.6 Mb	2003/12/17 12:11	1	
<input type="checkbox"/>	 Taube HVOF PEWG PRESENTATION 4.pdf	441.2 Kb	2003/12/22 10:36	1	
<input type="checkbox"/>	 Taube HVOF PEWG PRESENTATION 4.pdf	441.2 Kb	2003/12/22 10:46	1	
<input type="checkbox"/>	 Zipped Presentations - KSC November 2003 <i>Presentations can be downloaded individually from the zip file, or the entire ZIP file can be downloaded by right-clicking in the empty area to the right of the file name and clicking Save</i>	245.24 Mb	2003/12/22 10:20	1	

Select all | Unselect all Objects: 49 (1...49) of 49 Page size 100 Page 1 of 1

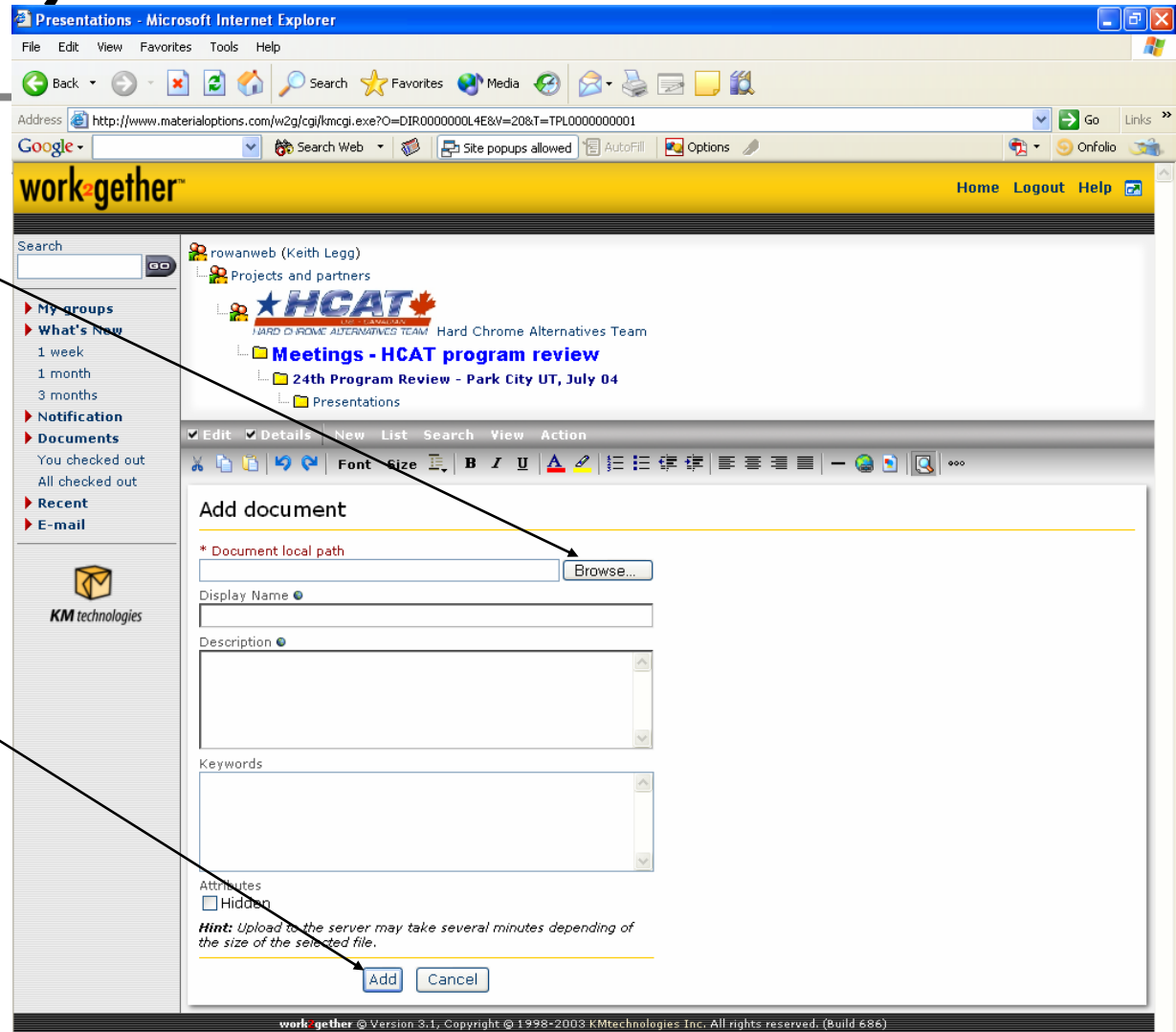
Uploading files

- Click New on menu
- Click Document on drop-down











Uploading (cont)

- Browse for filename on your machine
- Give it a Display Name (or leave blank and it will give it your filename)
- Add some descriptive comments if you feel it will help
- Click Add and wait for this screen to disappear and update the Document list








Uploading a new version (Licking the Clock)

- ❑ This is the only time most folks will ever need to click the little lock icon
- ❑ Click the lock icon  on the far right

<input type="checkbox"/> 	Deveraux - 3. P-3 SLAP HVOF MLG Piston Final Report.pdf	13.56 Kb	2004/03/24 09:13	1	
<input type="checkbox"/> 	Deveraux - 4. P-3 NAVAIR HVOF APPROVAL LETTER.pdf	80.97 Kb	2003/12/22 10:50	1	
<input type="checkbox"/> 	Edwards Hill bend testing.pdf	1.81 Mb	2003/12/17 09:08	1	
<input type="checkbox"/> 	Garcia HCAT HVOF - November 2003.pdf	882.44 Kb	2003/12/17 11:54	1	

- ❑ It will turn into a little key icon  and will ask if you want to download (just cancel)

<input type="checkbox"/> 	Deveraux - 3. P-3 SLAP HVOF MLG Piston Final Report.pdf	13.56 Kb	2004/03/24 09:13	1	
<input type="checkbox"/> 	Deveraux - 4. P-3 NAVAIR HVOF APPROVAL LETTER.pdf	80.97 Kb	2003/12/22 10:50	1	
<input type="checkbox"/> 	Edwards Hill bend testing.pdf	1.81 Mb	2003/12/17 09:08	1	

- ❑ Click the key, browse for the new version of the file and click Save. It uploads with Version # 2

Changing your password

- ❑ Individual password users all had an initial password
- ❑ To change it click your name
- ❑ This brings up your profile where you can change all sorts of stuff



ROWAN TECHNOLOGY GROUP
Linking Global Technologies with Markets

rowanweb (Keith Legg)

Projects and partners

HCAT
U.S. - CANADIAN
HARD CHROME ALTERNATIVES TEAM

Hard Chrome Alternatives Team

✓ Edit ✓ Details New List Search View Action

HCAT
U.S. - CANADIAN
HARD CHROME ALTERNATIVES TEAM

Team information sharing

ESTCP
Environmental Security
Technology Certification
Program

DoD EPA DOE SERDP
Strategic Environmental Research
and Development Program

This much-improved web site is designed to make it easier for team members to share data, to see discussions. For detailed instructions on how to use this site [click here](#).

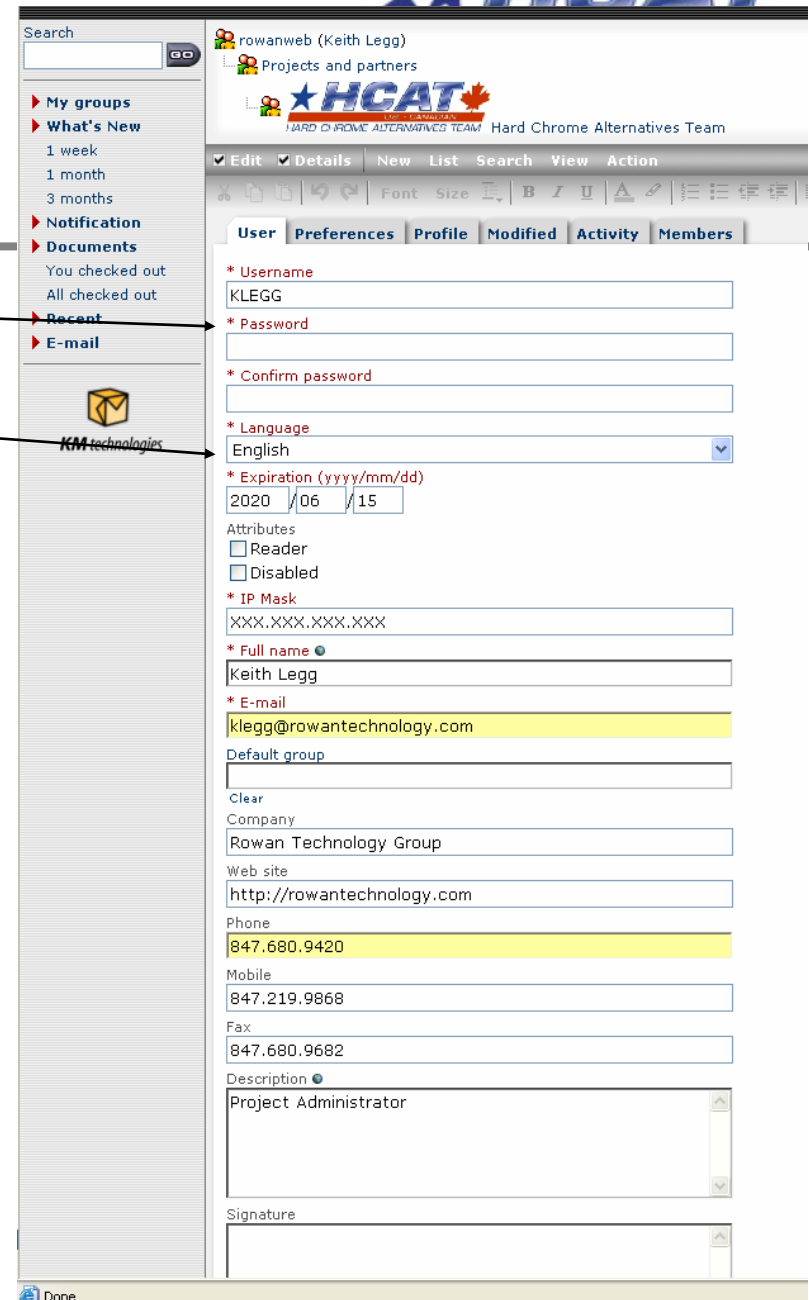
Type	Name
<input type="checkbox"/> Alloy Data	Basic steel data on 300M, 4340, Aermet 100
<input type="checkbox"/> Basic Project Information	Description of HCAT Program
<input type="checkbox"/> Commercial Chrome Replacement Programs	Delta Airlines flight testing

Keith Legg, klegg@rowantechnology.com

Your profile

Password

Preferred language for menus



The screenshot shows the HCAT (Hard Chrome Alternatives Team) user interface. At the top right is the HCAT logo. Below it, the user's name 'rowanweb (Keith Legg)' and 'Projects and partners' are displayed. A navigation menu on the left includes 'My groups', 'What's New' (with filters for 1 week, 1 month, 3 months), 'Notification', 'Documents', 'Recent', and 'E-mail'. The main content area is titled 'User' and contains various profile fields. The 'Password' field is highlighted with a red asterisk. The 'Preferred language for menus' field is highlighted with a blue dropdown arrow. The 'E-mail' field is highlighted with a yellow background. The 'Phone' field is also highlighted with a yellow background. The 'Description' field contains the text 'Project Administrator'.

Search GO

rowanweb (Keith Legg)
Projects and partners

HCAT
HARD CHROME ALTERNATIVES TEAM Hard Chrome Alternatives Team

✓ Edit ✓ Details New List Search View Action

User Preferences Profile Modified Activity Members

* Username
KLEGG

* Password

* Confirm password

* Language
English

* Expiration (yyyy/mm/dd)
2020 / 06 / 15

Attributes
☐ Reader
☐ Disabled

* IP Mask
XXX.XXX.XXX.XXX

* Full name
Keith Legg

* E-mail
klegg@rowantechnology.com

Default group

Clear

Company
Rowan Technology Group

Web site
http://rowantechnology.com

Phone
847.680.9420

Mobile
847.219.9868

Fax
847.680.9682

Description
Project Administrator

Signature

Done

Known issues

- ❑ **New Navy System seems to be demanding username and password again, then bumping people back to the opening page whenever they try to download**
 - **For most folks, putting www.materialoptions.com on the list of trusted sites will solve this**
 - **But not for the NNS – it is an issue with security and has to be sorted out with local gurus**
 - **We have used temporary file transfer to non-passworded area to solve this, but a pain for everyone**

Just click the link and.....



**No, it's not OK,
dammit Gates!!**

- ❑ **Actually the usual rule is "if you can see it you have rights to it"**
 - **Just enter username and password again**
 - **We have just figured this one out and will be modifying links to avoid it in future**
- ❑ **Also, when you use the back arrow to get back you often get a Gatesian "page expired" message**
 - **Just click the arrow again**

New non-passworded section for unlimited distribution reports



- ❑ JTRs
- ❑ Final reports
- ❑ Landing Gear (Canadian and US), Prop Hubs, GTEs
- ❑ JSF reports (unlim dist), Rowan
- ❑ DARPA pre-HCAT
- ❑ ID program reports
- ❑ JTPs
- Landing gear, Prop Hubs, Actuators, GTEs, ESD



HCAT Reports and Test Protocols - Microsoft Internet Explorer

Address: http://192.168.1.192/w2g/cg/kmcgi.exe?O=DIR0000000IW88V=0

work-gether

rowanweb (Keith Legg)

HCAT Reports and Test Protocols

My groups
What's New
1 week
1 month
3 months
Notification
Documents
You checked out
All checked out
Recent
E-mail

KM technologies

To view the contents of a **folder** click on the folder name
To view the contents of a **file** in your browser, click on the file name
To **download** a file right-click on the filename and choose Save Target As (or right-click just to the right of the filename) and choose Save
Some reports are in the form of zip files that contain several files and these work a little differently:

- You can download individually each file that is within the zip file by left-clicking the zip filename to view the fileset and then saving each file as above
- For a zip file right-clicking on the filename does not let you save the zip file itself. To download the zip file itself you must right-click just to the right of the filename (when you move your mouse over this area your cursor changes from a pointing hand to an arrow and the filename area changes to a light yellow). This brings up a menu. Choose Save.

If you have problems please call (847) 680-9420 and speak to Lila, or e-mail lsolnick@rowantechnology.com

Type	Name	Size	Modified	Version
Folder	Chrome Replacement on Internal Diameters <i>Reports of projects to replace ID hard chrome</i>	1 Ob.	2004/06/09 18:16	
Folder	DARPA pre-HCAT project <i>The HCAT program grew out of this evaluation of chrome replacement options. Report includes HVOF, PVD, Laser Cladding, and methods for reducing chrome tank emissions.</i>	1 Ob.	2004/03/25 11:51	
Folder	Gas Turbine Engine Report - HCAT <i>Validation of Thermal Spray Coatings for Hard Chrome Replacement in Gas Turbine Engines.</i>	1 Ob.	2004/06/09 18:17	
Folder	JSF Reports on Cr and Cd alternatives - Rowan <i>Rowan Technology Group Reports for the Joint Strike Fighter IPT. Cover Cr alternatives, Cd alternatives, Repair methods</i>	5 Ob.	2004/02/24 10:41	
Folder	Landing Gear Reports - HCAT, C-HCAT <i>HCAT and Canadian HCAT reports, including Joint Test Reports, Cost and Performance Reports, Final Program Reports</i>	6 Ob.	2004/06/09 18:15	
Folder	NRL Official Reports for Reference - Naval Research Lab <i>These reports are available from the Government Printing Office and can be referenced by their report numbers.</i>	2 Ob.	2004/06/09 18:17	
Folder	Propeller Hub Reports - HCAT <i>Joint Test Report, Cost and Performance Report, Final Report</i>	4 Ob.	2004/06/09 18:18	
Folder	Test Protocols	5 Ob.	2004/06/30 17:10	
File	HCAT Reports Header <i>Header for public HCAT Reports folder</i>	3.2 kb	2004/06/15 10:43	
File	http://www.hcat.org <i>Return to HCAT main page</i>	198 Bytes	2004/01/21 10:01	
File	http://www.materialoptions.com/w2g/cg/kmcgi.exe?O=GRP0000000FFL&V=0 <i>Hard Chrome Alternatives Team (HCAT) - Data and information on Cr and Cd alternatives (HVOF, Electrospark Deposition, nano Co-P electroplate, etc.)</i>	517 Bytes	2004/06/09 18:19	

Select all | Unselect all Objects: 11 (1...11) of 11 Page size 100 Page 1 of 1

Cut Copy Paste Route Delete E-mail

Clipboard

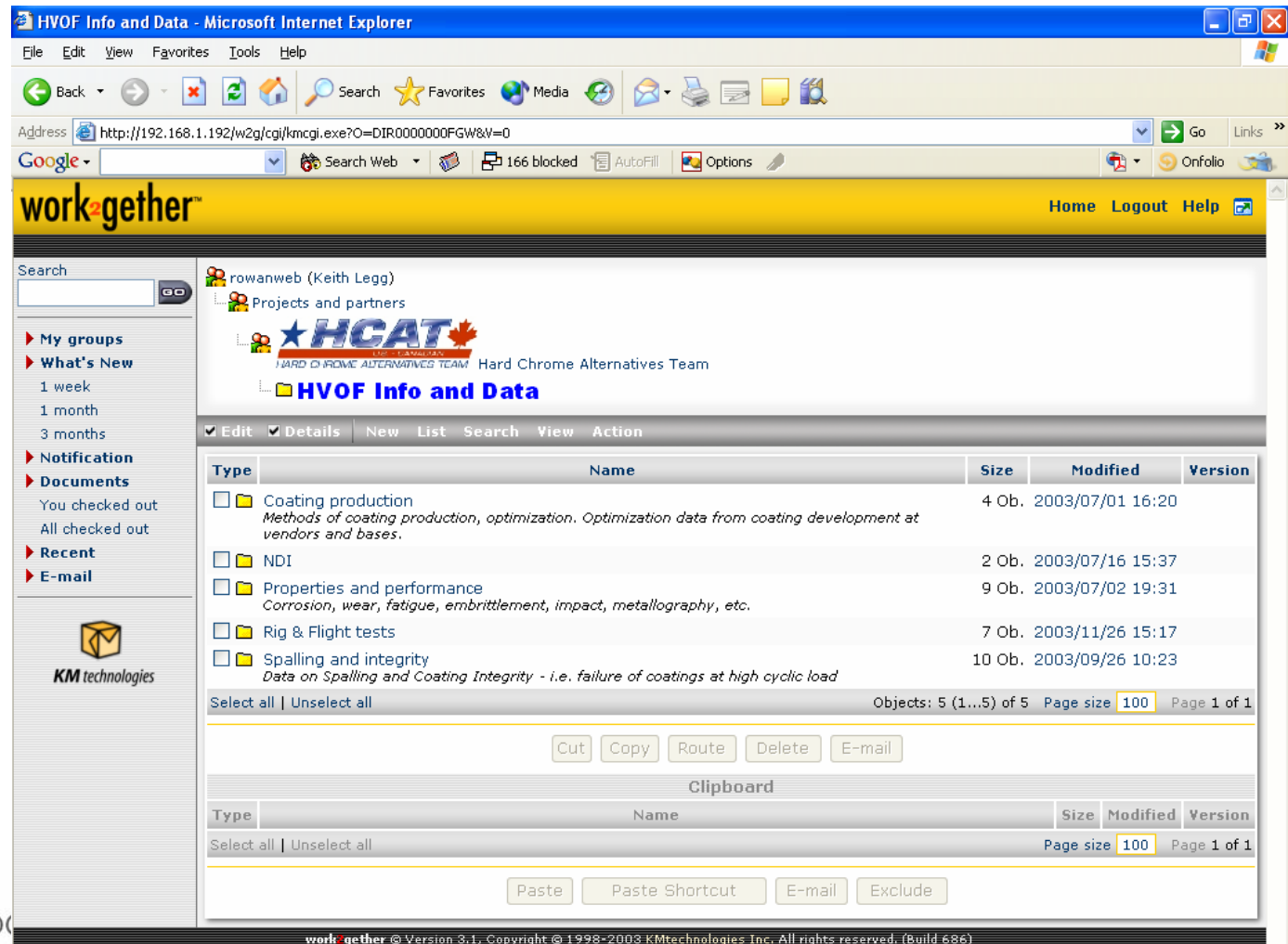
Type	Name	Size	Modified	Version
Select all Unselect all Page size 100 Page 1 of 1				

Paste Paste Shortcut E-mail Exclude

Done Internet

HVOF Info and Data

This is where most of the established data is stored



The screenshot shows a web browser window titled "HVOF Info and Data - Microsoft Internet Explorer". The address bar shows a URL: `http://192.168.1.192/w2g/cgi/kmcgi.exe?O=DIR0000000FGW&V=0`. The page features a yellow header with the "work2gether" logo and navigation links: Home, Logout, Help. Below the header, there's a search bar and a sidebar with navigation options: My groups, What's New (1 week, 1 month, 3 months), Notification, Documents (You checked out, All checked out), Recent, and E-mail. The main content area displays the "HVOF Info and Data" directory listing. It includes a table with columns: Type, Name, Size, Modified, and Version. The table lists five folders: Coating production, NDI, Properties and performance, Rig & Flight tests, and Spalling and integrity. Below the table, there are buttons for Cut, Copy, Route, Delete, and E-mail. A clipboard section is also visible, showing the same table structure. The footer of the application states: "work2gether © Version 3.1, Copyright © 1998-2003 KMtechnologies Inc. All rights reserved. (Build 686)".

Type	Name	Size	Modified	Version
<input type="checkbox"/> Folder	Coating production <i>Methods of coating production, optimization. Optimization data from coating development at vendors and bases.</i>	4 Ob.	2003/07/01 16:20	
<input type="checkbox"/> Folder	NDI	2 Ob.	2003/07/16 15:37	
<input type="checkbox"/> Folder	Properties and performance <i>Corrosion, wear, fatigue, embrittlement, impact, metallography, etc.</i>	9 Ob.	2003/07/02 19:31	
<input type="checkbox"/> Folder	Rig & Flight tests	7 Ob.	2003/11/26 15:17	
<input type="checkbox"/> Folder	Spalling and integrity <i>Data on Spalling and Coating Integrity - i.e. failure of coatings at high cyclic load</i>	10 Ob.	2003/09/26 10:23	

HELP!!!

How to do it

By

Baron Victor von Frankenstein

